Flight Surgeon Refresher Course

Section 2: Role of the Flight Surgeon

Role of the Flight Surgeon
(FSRC200)

ROLE OF THE FLIGHT SURGEON AND THE AVIATION MEDICINE PROGRAM

Introduction

The Flight Surgeon and the Aeromedical Physician Assistant form a team that plays a vital role in the U.S. Army Aviation Medicine Program orchestrating all aspects of this program at the unit level.

Historically, Army authorities mandated Flight Surgeons and required the commanders to establish an Aviation Medicine Program. Specific details about these authorities and the roles of both the Flight Surgeon and the Aviation Medicine Program are found in multiple medical, aviation, safety, and personnel regulatory publications.

The creation of the Flight Surgeon position and the Aviation Medicine Program came as the result of command recognition of the vital need to protect the personnel, equipment, time, labor, and financial resources necessary to build, maintain and deploy our U.S. Army Aviation forces.

The roles of each are both unique and, at the same time, interrelated.

The role of the Flight Surgeon is two-fold in that it involves both clinical and non-clinical duties. These roles, in fact, have interwoven responsibilities. Besides regular clinician duties, the Flight Surgeon is assigned non-typical duties that make the 61N Flight Surgeon unique and the 65 DM3 APA from other medical military occupational specialty professions.

The ability of the Flight Surgeon to properly and wisely advise the command is enhanced through practical learning by non-clinical participation with aircrew on the flight line and in the air. It is critical that you thoroughly understand their job requirements and the stresses your supported aircrew and ground personnel encounter in their work environment, both on the ground and in the air.

The Flight Surgeon's non-clinical duties include, but are not limited to, participation in aerial flight, aeromedical training, accident prevention, safety promotion, and operational exercises. By performing these duties, a comprehensive preventive, occupational, and environmental medicine program is built that is both necessary for making medical recommendations to the commander and forms the basis for a successful aviation medicine program.

As the unit Flight Surgeon and Special Staff officer to your commander, you may feel isolated from your peers in the Army Medical Department (AMEDD). However, please understand that, globally, you are not alone with the responsibility for building a successful aviation medical program. In fact, there are several medical and aviation organizations and personnel up to the level of the Office of The Surgeon General that comprise the Aviation Medicine team. These are established and mandated by regulation and provide support to the Flight Surgeon and the local Aviation Medicine Program.

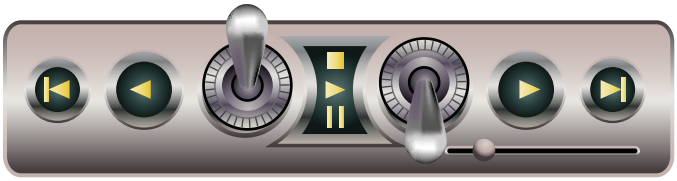
However, to maximize your local success, you must gain, and depend upon, a thorough understanding of the roles, relationships, and responsibilities among these organizations.

The main mission of the Aviation Medicine Program is prevention. The objective is zero equipment damage/failure, zero personnel injuries and fatalities and, ultimately, successful mission completion. The main asset of the program's goal of 100% aviation safety is a carefully researched and developed education/training curriculum designed to thoroughly prepare personnel to be alert and capable of identifying and neutralizing potentially harmful or life-threatening situations thus preventing accidents (damage to equipment, injury or death to personnel).

In this section of the FSRC training, you will learn about the regulations that govern the Aviation Medicine program and the roles of the Flight Surgeon. In particular, your focus will be on AR 385-95 and AR 40-3, Chapter 3. These are the primary U.S. Army regulations that establish the clinical and non-clinical aeromedical roles of the Flight Surgeon and the hierarchal support structure of the Aviation Medicine program.

Next, you will learn the titles and brief job descriptions of the other members of the aeromedical team.

If you do not recall or understand any of the aeromedical terminology used in the following lessons, please refer to the glossary for a more detailed explanation.



Objectives:

a. **Cite the regulatory references that govern the Aviation Medicine Program.**

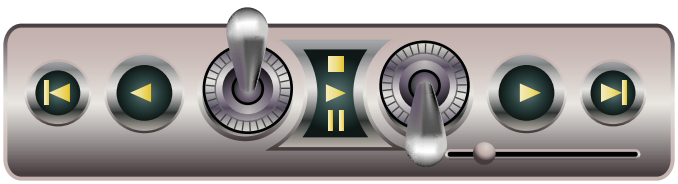
b. **Recite the primary goal of the Aviation Medicine Program.**

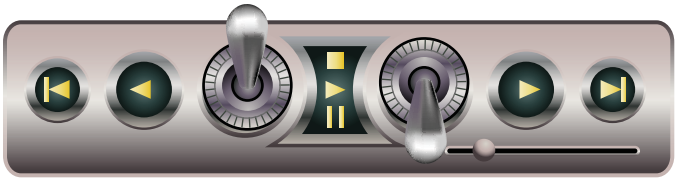
c. **Identify the support hierarchy of the Aviation Medicine Program.**

d. **Describe the primary function of each element of the Aviation Medicine Program support hierarchy.**

e. **List the members of the aeromedical team and describe their primary responsibiities.**

g. **Discuss the clinical and non-clinical duties of the Flight Surgeon.**





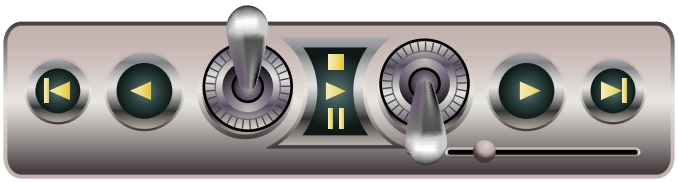
Role of the Flight Surgeon and the Aviation Medicine Program

The Aviation Medicine Program is the **commander's** program. As Flight Surgeons we are technical advisors on this program which is preventative in nature and designed with one primary goal: to prevent aviation mishaps and enhance aviation safety.

Regulations governing the Aviation Medicine Program

The Army Aviation Medicine Program is an amalgam of many elements outlined by Army regulations. The authority of the program and guidelines for its conduct are described in a multitude of regulations. Here are some the the salient references.

Regulations that specifically govern Aviation Medicine Programs			
Number	**Title**	**Focus**	**Summary**
AR 385-95	Army Aviation Accident Prevention	Aviation accident prevention	The Flight Surgeon will assist and advise the command in all aviation medicine matters. Note: In some instances, like remote areas or installations with very few aviation assets, a Flight Surgeon won't be assigned or readily available and units may struggle to work out the Aviation Medicine support structure
AR 40-3	Medical, Dental and Veterinary Care	Chapter 3 of this regulation specifically addresses the aviation medicine program and medical care of aviation personnel	The unit Flight Surgeon is NOT solely responsible for the aviation medicine program. It is a team effort between command, FS/APA and various aviation medicine organizations.
AR 40-501	Standards of Medical Fitness	Chapters 4 and 6 addresses fitness for flight duty and aeromedical administration	The flight surgeon is responsible for conducting Flight Duty Medical Exams in order to determine aircrew's fitness for flight duty, as well as providing medical care to the aviation community.
AR 95-1	Flight Regulations	Chapter 8 addresses Aviation Life Support Equipment	Flight Surgeons are responsible for medical aspects of aircrew training and monitoring the fit and use of Aviation Life Support Equipment. Many aspects of aviation are governed IAW AR 95-1 and require involvement of the Flight Surgeon.
AR 600-105	Aviation Service of Rated Army Officers	Qualifying and disqualifying aviation officers	The flight surgeon is responsible for preliminary determinations of aeromedical fitness, performing aeromedical consultations, and advising flight evaluation review boards.



Regulations that specifically govern Aviation Medicine Programs			
Number	**Title**	**Focus**	**Summary**
AR 616-110	Selection, Training, Utilization and Career Guidance for Army Medical Corps Officers as Flight Surgeons	The role of the Flight Surgeon	Specifies the training and mission of flight surgeons as well as obligations incurred after completion of Flight Surgeon initial training.
AR 40-8	Aviation Service of Rated Army Officers	Qualifying and disqualifying aviation officers	The flight surgeon is responsible for preliminary determinations of aeromedical fitness, performing aeromedical consultations, and advising flight evaluation review boards.
AR 40-21	Medical Aspects of Army Aircraft Accident Investigation	The role of the Flight Surgeon in accident investigation	Specifies the training and mission of flight surgeons.
AR 40-68	Clinical Quality Management	Chapter 7 addresses the role of Aviation Physician Assistants (APAs) in the aviation medicine program	APAs will perform aviation medical duties under the supervision of a flight surgeon and share the responsibilities of the Flight Surgeons.
AR 385-40	Accident Reporting and Records	Chapter 4 addresses the role of the Flight Surgeon in accident investigation	A flight surgeon must be on an accident investigation board if the accident involves injuries or problems with personal protective equipment, egress from the aircraft, MEDEVAC, rescue or survival.

Duties of the Flight Surgeon

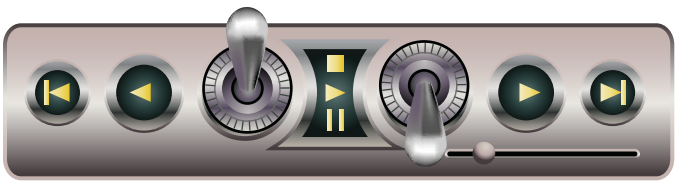
The Flight Surgeon and Aeromedical Physician Assistant (APA) share a wide variety of responsibilities to the Commander in the unit's Aviation Medicine Program. These responsibilities and the authority for the program are derived from the previously listed regulations. It is encumbent on the aviation medicine team to endeavor to establish a local program which addresses all the responsibilities listed here.

General Duties

- Serve as the medical liaison within the aviation command.
- Implement the local Aviation Medicine Program.

Clinical Duties

- Provide routine primary care for ALL aviation and support personnel (and for aviation family members on a space available basis).
- Review care provided by other health care providers on aviation and support personnel and evaluate its impact on the flight status of that individual.



- Conduct Flight Duty Medical Examinations (FDMEs).
- Review FDMEs performed by other providers.
- Perform aeromedical consultation and in-flight evaluations.
- Provide 24 hour on-call service for aeromedical emergencies and evacuation.
- Ensure timely evaluation of aviation personnel who are medically disqualified, temporarily disqualified following an aircraft accident or newly assigned to the unit.
- Frequently monitor the physical and mental health of aviation personnel.

Non-Clinical Duties

Administrative

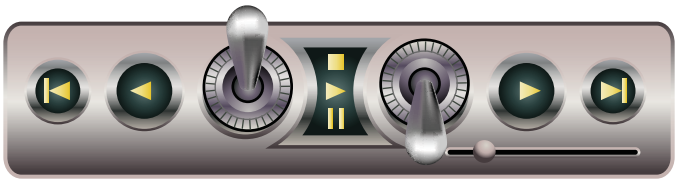
- Establish procedures for automatically grounding crewmembers when seen in other clinics.
- Serve as liason between medical and aviation elements acting as advocate for the Aviation Medicine Program.
- Participate as a Flying Evaluation Board (FEB) member to determine the suitability of personnel to perform their aviation duties
- Organize and report on special medical consultations when human factors or medical laboratory findings are involved.
- Provide oversight of the maintenance of Health records (HREC) on aviation personnel, including non-operational aviators.
- Issue the DA Form 4186 (Medical Recommendations for Flying Duties) for the unit commander's approval.
- Assist and advise the command on the hearing and occupational vision program

Safety

- Advise the commander on crew endurance, crewmember interactions and crewmember interface with equipment and the environment.
- Make recommendations to the Commander, Combat Readiness Center, for improvement of human factors compatibility, crashworthiness, aviation life-support equipment and survival features of aircraft.
- Attend unit social functions. Alcohol abuse, self-medication problems and other distracting personal problems can be more readily identified to help prevent potential accidents.
- Serve as a member of the unit level safety council.
- Participate in aircraft emergency exercises to observe effectiveness of response, communication, and medical support..
- Attend and actively participate in aviation safety stand-downs to educate aviation crewmembers on the aeromedical aspects of flight.
- Take an active part in formulating and regularly updating the medical portion of the pre- accident plan.
- In the event of an aviation mishap, manage casualties, assist at mishap site, obtain necessary lab specimens and serve as an Accident Investigation Board member.
- Medically clear crewmembers for further flight duty after aircraft accidents.
- Monitor the ALSE program.
- Monitor survival and physiologic training.
- Advise the command of potential safety problems.
- Promote the health and safety of aviation personnel by instituting a health education program.
- Monitor the conditions and hazards present in the work environment.
- Assist the unit with annual occupational health and safety screening for non-crewmember personnel (e.g. fuel handlers).

Operations and Training Duties

- Ensure the command considers preventive and occupational aspects of all plans, operations, training and security missions.
- Participate in flight line operations:
  - Conduct aeromedical occupational medicine inspections.
  - Monitor physical and psychological stresses of crewmembers.



  - Fly in each type of aircraft assigned to supported units in all flight environments.
  - Participate in unit field training exercises and unit day-to-day activities.
  - Make frequent flight line visits, and attempt to fly with every crewmember in the unit; this provides an opportunity to observe the flying ability and characteristics of each assigned aviator.
- Provide readiness and mobility support:
  - Assist in medical staff planning activities associated with tactical aviation operations.
  - Review aviation operation plans (OPLANS).
  - Advise the command on physiological and psychological factors affecting crew endurance.
  - Recommend policies and procedures for CBRNE operations.
- Assist the commander in developing an aeromedical training program IAW FM 3-04.0301.
- Serve as a medical technical advisor for local air ambulance operations and participate in evacuation missions as appropriate.

Canned presentations and lesson plans may be downloaded for aeromedical academic topics required IAW FM 3-04.0301 from the US Army School of Aviation Medicine web site. For more information visit:

http://usasam.amedd.army.mil

Aeromedical Hierarchy

The unit Flight Surgeon is not solely responsible for the aviation medicine program. Several hierarchical levels of support to the local flight surgeon and responsibility for the aviation medicine program are specified in chapter 3, AR 40-3.

The Surgeon General

- Responsible for the development, fiscal planning, and oversight of Army policies and programs for the Aviation Medicine Program. (Much of this is delegated to the aviation medicine consultant).
- All Major Command (MACOM, e.g. FORSCOM) commanders enforce the regulatory aspects within their commands (e.g. Aviation Resource Management Surveys (ARMS).

The Aviation Medicine Consultant to the Surgeon General

- Assists in policy formulation and technical supervision of the overall aviation medicine program.

The MEDEVAC Consultant to the Surgeon General

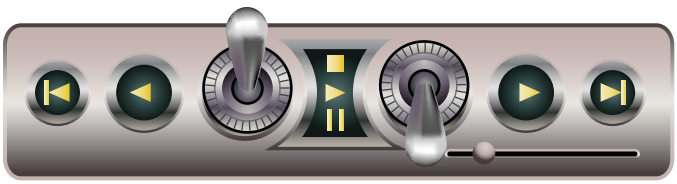
- Assists in policy development and oversight of the MEDEVAC support structure for the entire Army.

The Dean, US Army School of Aviation Medicine

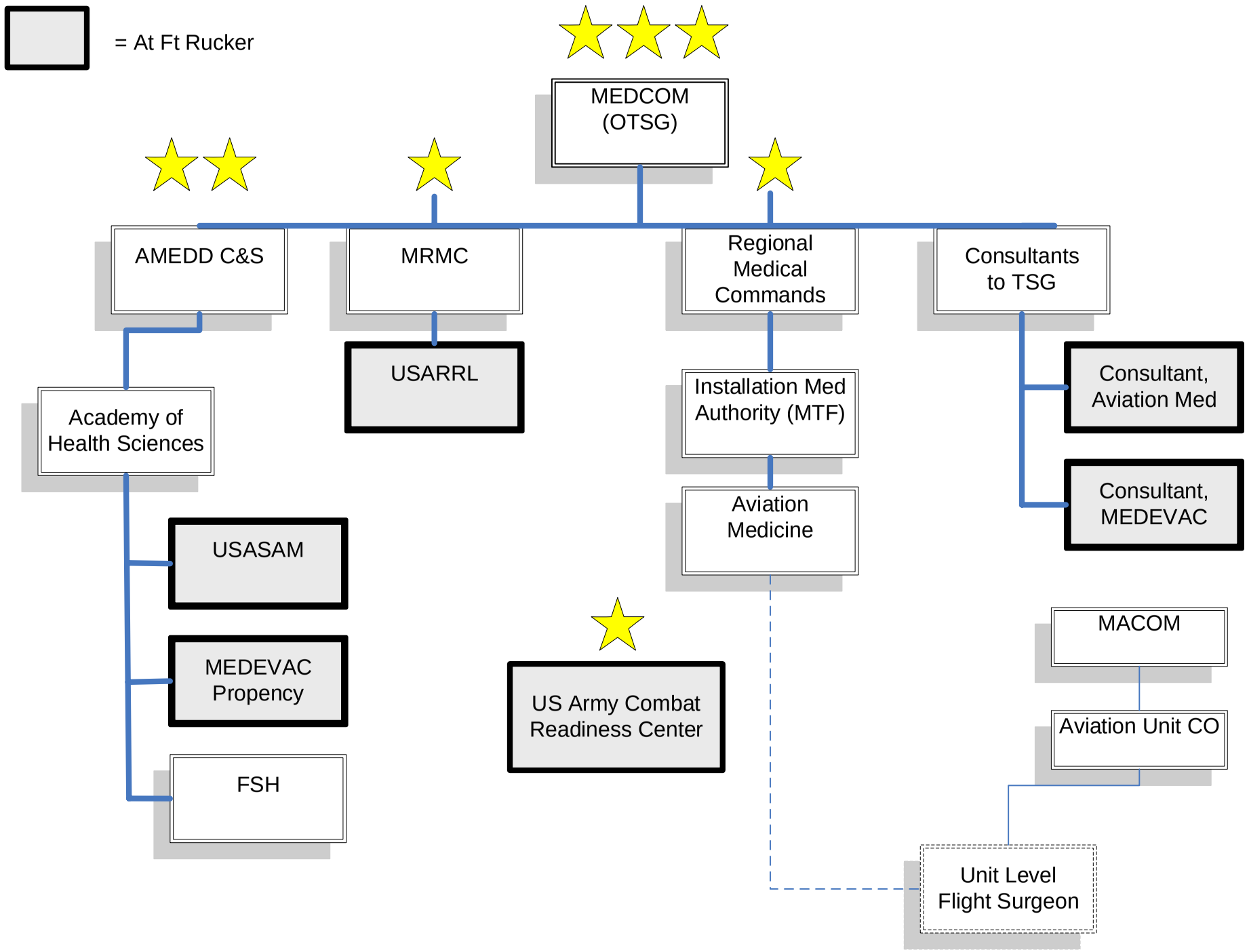
- Assists the Aviation Medicine consultant to the Surgeon General in all aspects of aeromedical education and training, including developing qualification courses and conducting the Army Aerospace Medicine Residency Training Program. Additionally, the Dean is responsible for supervising the aeromedical portion of the ARMS.

The Commander, US Army Aeromedical Activity (USAAMA)

- Provides worldwide support of Army Aviation Medicine Programs through consultations, supportive services and training in the areas of aviation and military occupational disease prevention, surveillance and evaluation.



Aviation Medicine Program Support Hierarchy



- Reviews and recommends dispositions of flying duty medical examinations and medical waiver requests for continued flying duty according to AR 40-501.
- Maintains the Aeromedical Epidemiological Data Repository (AEDR) to support research and clinical studies for aircrew medical standards and policy.

The Commander, US Army Aeromedical Research Laboratory (USAARL)

- Conducts research on the effects of exogenous aeromedical factors in the aviation operational environment.
- Researches and develops Aviation Life Support Equipment (ALSE)
- Manages the ALSE Retrieval Program (ASERP).

The Commander, US Army Combat Readiness Center

- Investigates human factors in aviation safety, aircraft design and aviation mishaps.

Regional Medical Command (RMC) commanders

- Ensure implementation of the Aviation Medicine Program.
- Appoint a residency-trained aerospace medicine specialist, or a senior experienced flight surgeon assigned to that region, as the Chief, Aviation Medicine to oversee the RMC Aviation Medicine Program.

The installation medical authority (Medical Treatment Facility commander)

- Establishes, supervises, administers and supports the installation Aviation Medicine Program
- Appoints a Chief, Aviation Medicine to oversee the installation Aviation Medicine Program.

The unit-level Flight Surgeon and APA

- Establishes, supervises, administers the unit Aviation Medicine Program.
- Most of the actual “hands on” aviation medical duties are performed at this level.
- This is “where the rubber meets the road.”

The Aeromedical Team

It takes a number of people to make a successful Aviation Medicine Program. Take the time to find out what your local resources are.

Specialist in Aerospace Medicine (SAM)

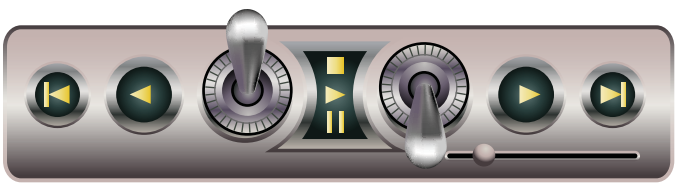
- A “professional flight surgeon”
- A physician with specialty level training in aerospace medicine (4 year Residency in Aerospace Medicine, the “RAM”) in the field of preventive medicine, occupational medicine, aviation safety, aviation operations, aeromedical standards, aerospace physiology, hyperbarics and space medicine.
- Provides depth of expertise in managing complex aeromedical dispositions, which is critical given our aging active duty, reserve component, and civilian aviators.
- Provides leadership in the specialty; assignments are designed to provide mentorship for junior Flight Surgeons.
- Usually assigned to Brigade level or higher or programmatic positions (e.g., AAMA, USASAM, CRC, etc.).

Flight Surgeon (61N9D)

- Physician holding a license in another medical specialty or General Medical Officer (GMO).
- Must complete a 6 week training program in Aviation Physiology, Aviation Operations, the Aviation Medicine Program, and Aviation Safety.

Aeromedical Physicians Assistant (APA) (65DM3)

- Must complete the 6 week Flight Surgeon Course.
- Practices under supervision of a flight surgeon.
- Shares all duties with Flight Surgeon to conduct the unit Aviation Medicine Program.
- Plan, organize, perform, and supervise level I and II troop medical care.
- Perform Flying Duty Medical Examinations
- Issue DD 4186 with some minor restrictions



Clinical or Research Psychologist

- Complete 3 week Joint Aeromedical Psychology Course at USASAM.
- Invaluable consultant to the Flight Surgeon for psychiatric issues in aircrew.

Enroute Care Providers

- Clinical medical providers (doctors, nurses, medics (EMT) trained in enroute care delivery of aircraft
- Augment medical team in aeromedical evacuation.

Flight medic (91W-F)

- Provides primary agent for en route patient care.
- Non-rated Crewmember.
- Search & Rescue (SAR).
- Maintains the medical equipment set air ambulance (MESAA).

Aeromedical Record clerk

- Compiles Army Aviation Medicine Orientation Course
- File, route and transmit FDMEs and other medical forms**.**
- Manages Aviation Medicine Clinic Operations.

Tips for a successful Aviation Medicine Program:

Know your patients, your unit and its mission.

Meet your flight minimums; stay involved in the unit flying program. Fly in all types of aircraft and all types of missions your unit conducts.

Educate MTF staff on grounding policies.

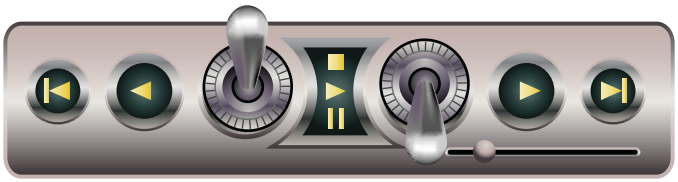
Keep an open line of communications with the commander, especially when grounding aviators.

Maintain your own personal aeromedical reference library.

Review previous inspections and conduct a self-assessment pre-ARMs inspection using an appropriate checklist. A good choice is to download the latest ARMS checklist for Aviation Medicine. http://usasam.amedd.army.mil/_arms/frames/index.htm

Keep a memorandum or flow sheet for non-clinical activities you perform as a Flight Surgeon.

If you don't know, ask! (The commander, other flight surgeons).



US Army School of Aviation Medicine
301 Dustoff
Fort Rucker , AL 36362

334 • 255 • 7460
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